

Some Species of the Genus *Bathypogon* Loew

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Flies of small or medium size which belong to the subfamily Dasypogoninae and are characteristic of the Chilean and Australian regions. A number of undescribed species have recently been found in collections and several are described in this paper.

Bathypogon ichthyurus, new species

A small species with wholly black color, except some red on the terminalia and the very dark reddish brown humerus. Further characterized by the 4 pairs of scutellar bristles and the curious, fish-tailed process curving down to the apex of the superior forceps. Length 12 mm.

Male. *Head*: The head is black in ground color, the vertex and front are wider than usual, the occipital pollen grey, the pollen of front and vertex quite thin, somewhat brownish across the upper front and vertex and yellowish grey on the lower half of the front, except for a narrow border along the eye margin, which is longer, denser and brownish yellow. Face a little wider, more produced and protuberant, the elevation occupying the lower two-thirds; the pubescence is greyish white with a yellow cast and the eye margins laterally have thick yellow pubescence continued from the front but not extending on the lower face or cheeks. Bristles of face unusually numerous but not very stout. Palpus and proboscis black. All pile and bristles of the head pale brownish yellow, except those of the ocellarium and the short bristles on the upper occiput, which are light brown. Antenna black, except the base of third segment and apex of the second segment, which are sepia brown. Third segment slender, only slightly dilated, the style a little longer than usual.

Thorax: The thorax is everywhere quite black, except on the humerus, which is quite dark reddish brown. Pollen over the mesonotum, including the lateral margin before the suture, dark brown with a distinct reddish cast, but behind the suture some-

what greyish yellow. Though badly preserved, there are evidences of 2 submedial, black stripes separated by 3 narrow vittae of pale brownish yellow pollen, which might possibly be described as greyish yellow. The complement of thoracic bristles consists of 1 posthumeral, 2 notopleural, 1 supraalar, 2 postalar and 4 pairs of strong scutellar bristles. Metapleural bristles not strongly differentiated. The pollen on the black pleuron is reddish to yellowish brown and appears to be rather thin over much of the pleuron.

Legs: The legs are black, except the dorsal surface of the anterior and middle tibiae, which is quite dark reddish brown and a little lighter on the basal half. Tarsi brownish black. All pile and bristles of legs pale brownish yellow. Claws rather slender, brown on the basal third.

Wings: The wings are nearly hyaline with dark brown veins. The lower end vein of the discal cell makes a strong angle with the lower end vein of the fourth posterior cell. There is a minute stump of a vein a short distance from the base of the anterior branch of the third vein.

Abdomen: The abdomen is black with only the terminalia dark reddish to reddish brown. Pollen of abdomen distinctly grey on the dorsal portion of the tergites, where it forms a large posterior triangle, which in some lights appears to be divided medially. The lateral pollen on the first 4 tergites is more or less dark reddish brown, lighter in color on the remaining tergites. The superior forceps are drawn down into an extended, sharply pointed, fish-tail process on each side, thus each half has 2 points with a deep concavity between. The process of the outer point is longer than the medial point. The hypandrium has a prominent, thin, rounded, scoop-like processes.

Type. Male, L. Callabonna, collected by A. Zietz. No date given. Type in the South Australian Museum.

***Bathypogon nigrotibiatus*, new species**

A moderately large species characterized by the general black ground color, the black femora and tibiae; the femora have only narrow, dark reddish brown stripes posteriorly. The thoracic

bristles are pale brown, the scutellar and facial bristles quite pale brownish yellow. Antenna black. A species with very distinct terminalia. The lower apex of the superior forceps has a curious, strong but slender, curved, pointed process; the hypandrium has stout, curved and excavated protuberances. Length 20 mm.

Male. Head: The ground color of the head is entirely black, the pollen quite pale greyish yellow, the pubescence of the same color. The stout bristles of the face are extremely pale brownish yellow. First 2 antennal segments are totally black; third missing. Palpus black, but pollinose and not shining, its pile and the lower occipital pile brownish white. Postvertical bristles quite pale.

Thorax: The thorax everywhere is black in ground color, the pollen dark brown widely over the middle and pale brownish yellow laterally. The extreme posterior corner of the humerus laterally has a tiny reddish brown spot. The stripes are very poorly differentiated from either anterior or dorsal view. Along the medial margin of the humerus the pollen is a little lighter and more nearly golden brown. The thoracic complement of bristles, all of them light brown, consist of 1 posthumeral, 2 notopleural, 1 supraalar, 2 scutellar pairs and 3 postdorsocentral elements. The pleural pollen is similar to that on the sides of the mesonotum.

Legs: The legs are everywhere black, except for an indistinct, posterodorsal, reddish brown stripe on the anterior and middle femora. Pile and bristles are pale brownish yellow. Claws stout, slightly more blunt than usual and more than the basal third is light brown.

Wings: The wings are nearly hyaline and dilutely tinged with pale brown, veins dark brown and at the extreme base light reddish brown. The lower end vein of the discal cell and the end vein of the first posterior cell are quite aligned.

Abdomen: The abdomen is blackish sepia in color, the lateral margins with dense, bright, golden brown pollen and the dorsal portion with thin, dark brown pollen. Pile and bristles pale. On the outer third the posterior margins of tergites 2 to 4 are

contrastingly colored, and to some extent this is true of the fifth tergite. These margins are pale brownish yellow with similar pollen. The terminalia are entirely blackish, except for the slender, ventroapical process on the superior forceps, which is red and the hypandrium which is a pale mahogany red ventromedially and again on its apical and lateral half. The ventral process from the hypandrium is darker. This process is quite characteristic and takes the form of a stout, curved, ventral, apically truncate and laterally excavated protuberance.

Type. Male, Cairns District, collected by F. P. Dodd. No date given. Type in South Australian Museum.

Bathypogon microdonturus, new species

A small, light reddish species with dark brown thorax. The head is black in ground color and all bristles are light yellowish brown. The hypandrium has only very small, short teeth. Length 13 mm.

Male. Head: The pollen of occiput and front and the pubescence of the face light brownish yellow or ochre colored. The bristles are similar, except those of the face, which are more yellowish. Antenna absent.

Thorax: The thorax is quite dark brown in ground color, including the humerus. Only the coxae are more reddish. The pollen of the mesonotum is a dark, golden brown, but anteriorly between the humeri it is a lighter and faintly reddish golden brown. Humeral, lateral, marginal and the whole pleural pollen is thick, pale, brownish to golden yellow. The thoracic complement of bristles consists of 1 posthumeral, 2 notopleural, 1 supraalar which may be lacking, 2 postalar, 2 scutellar pairs, 4 postdorsocentral and 4 weakly differentiated, metapleural bristles, besides the usual complement of stiff, long, metapleural hairs.

Legs: The femora are moderately stout and are light reddish brown to orange brown with the anterior surface of the anterior and middle pairs and the posterior surface of the hind pair dark sepia brown. The tibiae are light reddish brown with the anterior surface and lateral surface of the hind pair obscurely

darker. All tarsi light brownish red. Claws sharp, slender, with the basal third quite red. Pile and bristles of legs quite pale brown.

Wings: The wings are nearly hyaline and dilutely tinged with pale brown. Veins reddish brown, the apical fourth is darker and villose; the lower end vein of the discal cell makes quite a strong angle with the end vein of the fourth posterior cell, this being one of the strongest angles that we have seen.

Abdomen: The abdomen is reddish brown, darker on the dorsal portion and lighter along the lateral margins, the pollen rather uniformly pale reddish to yellowish brown. Terminalia chiefly reddish brown, rather dark except narrowly along the medial border of the superior forceps. Hypandrium with short, lappet-like processes.

Type. Male. Owicandana, North Flinders Range, collected by Hale and Tindale. Type in the South Australian Museum.

On the Bee Genus *Cyphomelissa* (Hymen., Apoidea)

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The genus *Cyphomelissa* Schrottky (1902) contains large robust, parasitic bees found in South America. The conspicuous differences between this genus and similar ones are indicated by Moure (1946, Notas sobre as mamangabas, Boletim Agrícola, 4: 21-50). The following account contains descriptions of two new forms and a key to known species.

¹ I wish to thank the Rockefeller Foundation (New York), the National Science Foundation (Washington) and the Campanha de Aperfeiçoamento de Pessoal de Nível Superior (Rio de Janeiro) for aid that made this study possible. Also, I wish to thank Dr. Carlos Alberto Campos Seabra of Rio de Janeiro for the stimulus and generosity which he is giving to studies of Brazilian bees, and Dr. Charles D. Michener of the University of Kansas for help in preparation of this paper.